

=> d l13 1-8 ti

- L13 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI A reduction inhibitory agent for active-oxygen eliminating activity
- L13 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI Formation of various koji-oligosaccharides by a novel enzyme, kojibiose phosphorylase
- L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI α -Isomaltosylglucosaccharide synthase from *Bacillus* and *Arthrobacter* catalyzing synthesis of cyclic tetrasaccharide, and food, cosmetics, and pharmaceutical applications
- L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI α -Isomaltosyltransferase catalyzing synthesis of cyclic tetrasaccharide from *Bacillus* and *Arthrobacter*, isolation, and food, cosmetics, and pharmaceutical applications
- L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI Efficient enzymatic synthesis of disaccharide, α -D-galactosyl α -D-glucoside, by trehalose phosphorylase from *Thermoanaerobacter brockii*
- L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI Reduction inhibitory agent for active-oxygen eliminating activity
- L13 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI Kojibiose phosphorylase, its preparation and use
- L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis by an α -glucosidase of glycosyl- trehaloses with an isomaltosyl residue

=> d l13 8 ibib abs

- L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:308881 CAPLUS <LOGINID:20080227>
DOCUMENT NUMBER: 127:16515
TITLE: Synthesis by an α -glucosidase of glycosyl-
trehaloses with an isomaltosyl residue
AUTHOR(S): Kurimoto, Masashi; Nishimoto, Tomoyuki;
Nakada, Tetsuya; Chaen, Hiroto; Fukuda,
Shigeharu; Tsujisaka, Yoshio
CORPORATE SOURCE: Hayashibara Biochemical Laboratories, Inc., Okayama,
700, Japan
SOURCE: Bioscience, Biotechnology, and Biochemistry (
1997), 61(4), 699-703
CODEN: BBBIEJ; ISSN: 0916-8451
PUBLISHER: Japan Society for Bioscience, Biotechnology, and
Agrochemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Glycosyl trehaloses with an isomaltosyl residue were synthesized
by α -glucosidase from *Aspergillus niger* by using maltotetraose as a
glucosyl donor and trehalose as the acceptor. The 1
trisaccharide and 2 tetrasaccharides formed were isolated by successive

column chromatog. The results of enzymic digestion, methylation anal., and ¹³C-NMR studies indicated that these oligosaccharides were α -isomaltosyl α -glucoside, α -isomaltotriosyl α -glucoside, and α -isomaltosyl α -isomaltoside. These oligosaccharides were not fermented to an acid by *Streptococcus mutans* and they effectively inhibited water-insol. glucan synthesis from sucrose by glucosyltransferase. In an in vitro utilization test with human intestinal bacteria, these oligosaccharides were predominantly utilized by *Bifidobacteria*.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
22.55	132.02

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-0.80	-6.40

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FILE 'STNGUIDE' ENTERED AT 14:49:12 ON 27 FEB 2008
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d his

(FILE 'HOME' ENTERED AT 13:50:36 ON 27 FEB 2008)

FILE 'REGISTRY' ENTERED AT 13:50:54 ON 27 FEB 2008

L1 STRUCTURE UPLOADED
L2 0 S L1 SAM SSS
L3 6 S L1 FULL EXACT

FILE 'CAPLUS' ENTERED AT 13:51:43 ON 27 FEB 2008

L4 8 S L3
L5 7 S L4 AND PY<=2004
L6 1 S L4 NOT L5

FILE 'REGISTRY' ENTERED AT 14:34:43 ON 27 FEB 2008
E A-D-GLUCOPYRANOSIDE, O-A-D-GLUCOPYRANOSYL-(1.3)-B-D-GLUCOPYRA

FILE 'REGISTRY' ENTERED AT 14:36:46 ON 27 FEB 2008

L7 1 S 832700-09-1/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'CAPLUS' ENTERED AT 14:37:31 ON 27 FEB 2008

L8 1 S 832700-09-1/RN

FILE 'CAPLUS' ENTERED AT 14:44:19 ON 27 FEB 2008

E NISHIMOTO/AU
E NISHIMOTO T/AU
E NISHIMOTO TO/AU

FILE 'STNGUIDE' ENTERED AT 14:45:24 ON 27 FEB 2008
L9 0 S NISHIMOTO TOMOYUKI/AU OR WATANABE HIKARU/AU OR FUKUDA SHIGEHA

FILE 'CAPLUS' ENTERED AT 14:47:06 ON 27 FEB 2008
L10 282 S NISHIMOTO TOMOYUKI/AU OR WATANABE HIKARU/AU OR FUKUDA SHIGEHA
L11 81 S L10 AND TREHALOSE
L12 49 S L11 AND PY<=2003
L13 8 S L12 AND GLUCOSYL

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=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.24	132.26
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-6.40

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:51:21 ON 27 FEB 2008